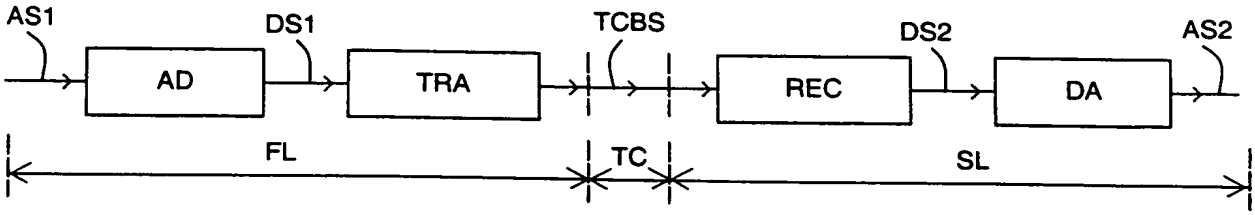

AS1
DS1
TCBS
DS2
AS2
AD
TRA
REC
DA
FL
TC
SL

Fig. 1

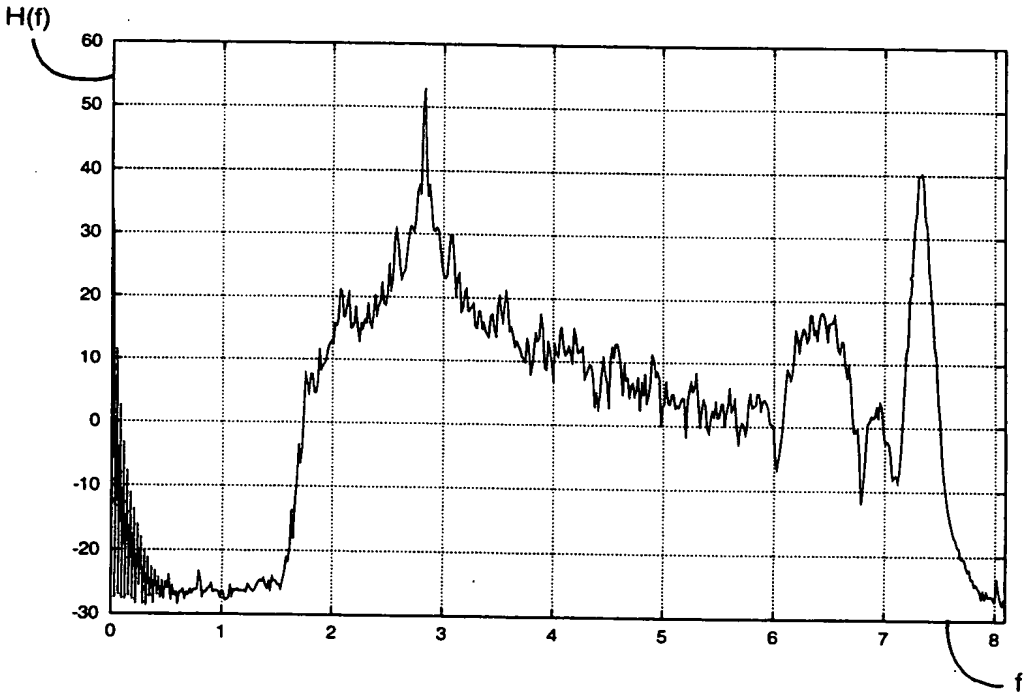

H(f)
60
50
40
30
20
10
0
-10
-20
-30
0
1
2
3
4
5
6
7
8
f

Fig. 2

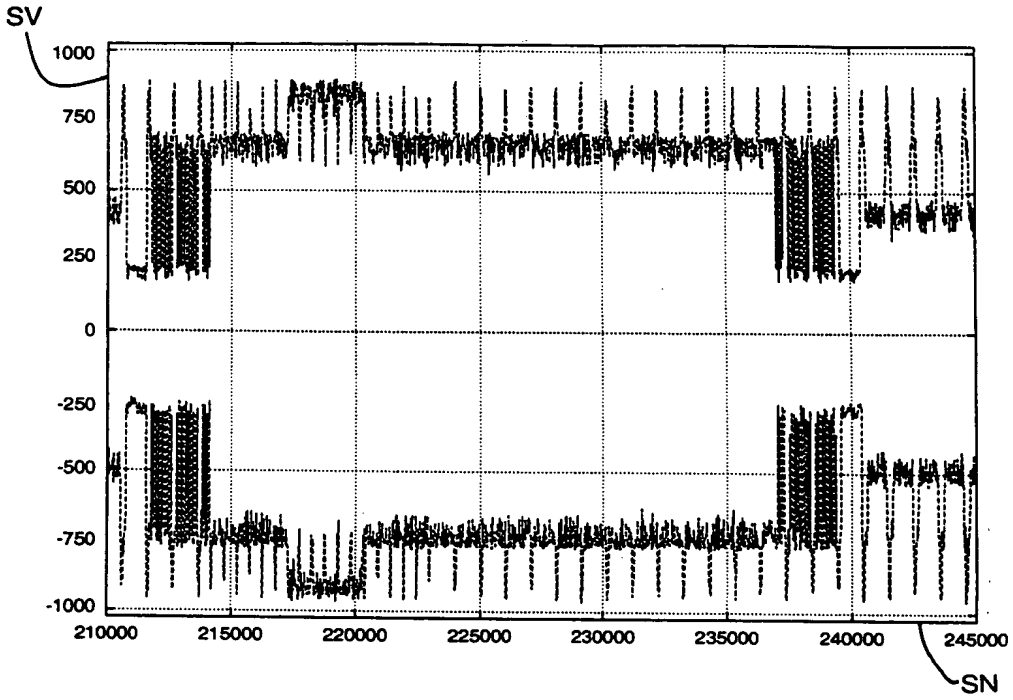

SV
1000
750
500
250
0
-250
-500
-750
-1000
210000
215000
220000
225000
230000
235000
240000
245000
SN

Fig. 3

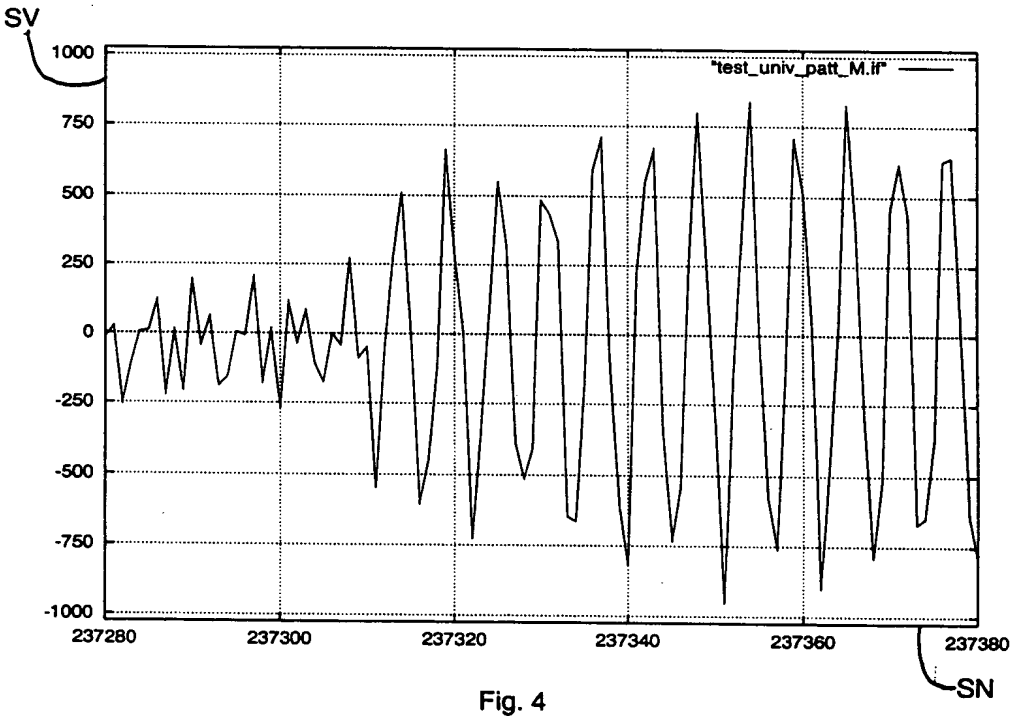

SV
1000
750
500
250
0
-250
-500
-750
-1000
"test_univ_patt_M.if"
237280
237300
237320
237340
237360
237380
SN

Fig. 4

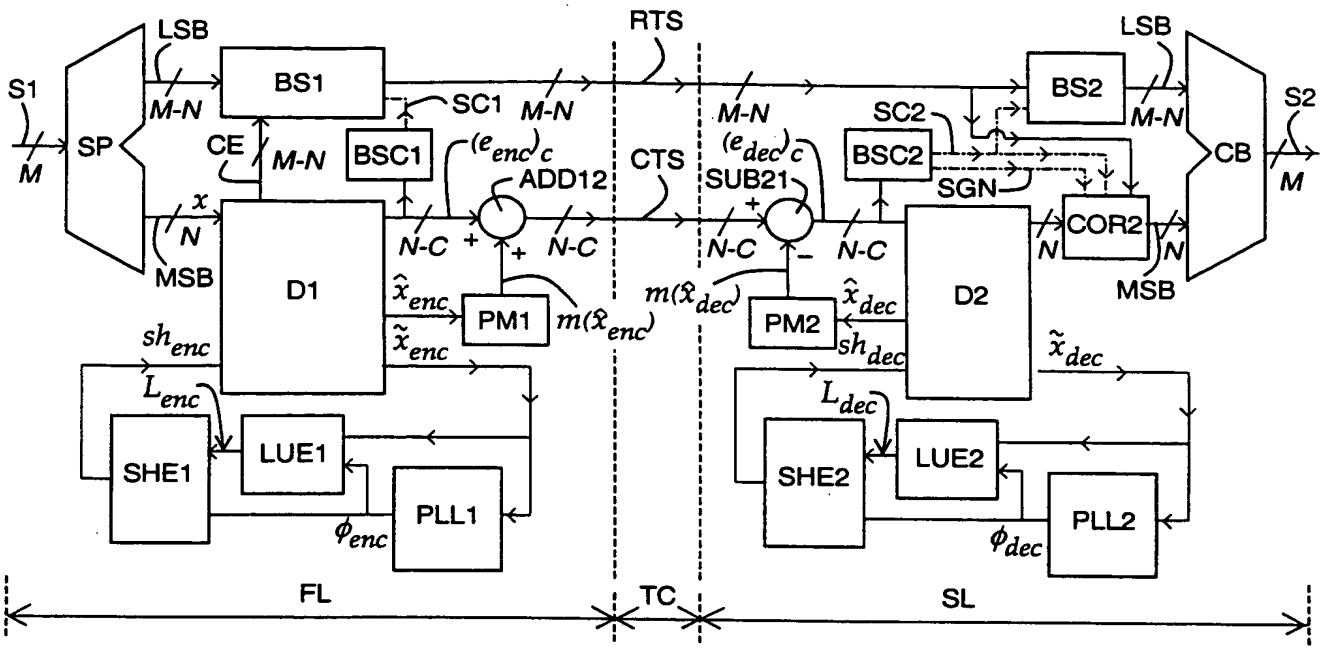


Fig. 5

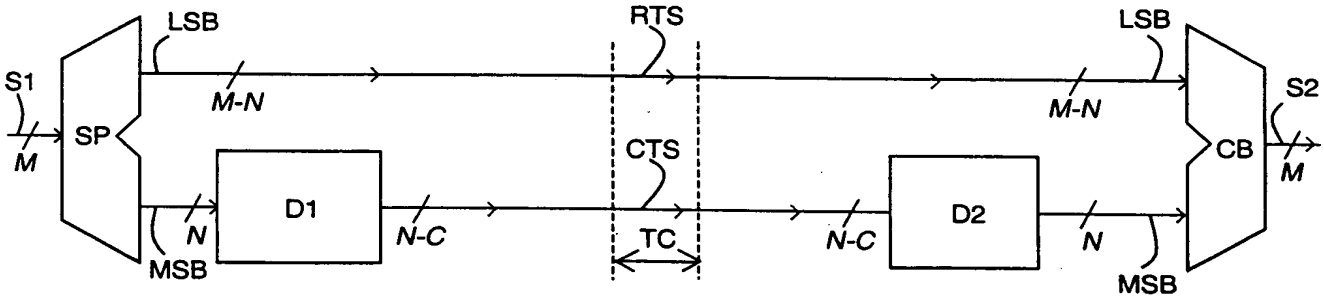
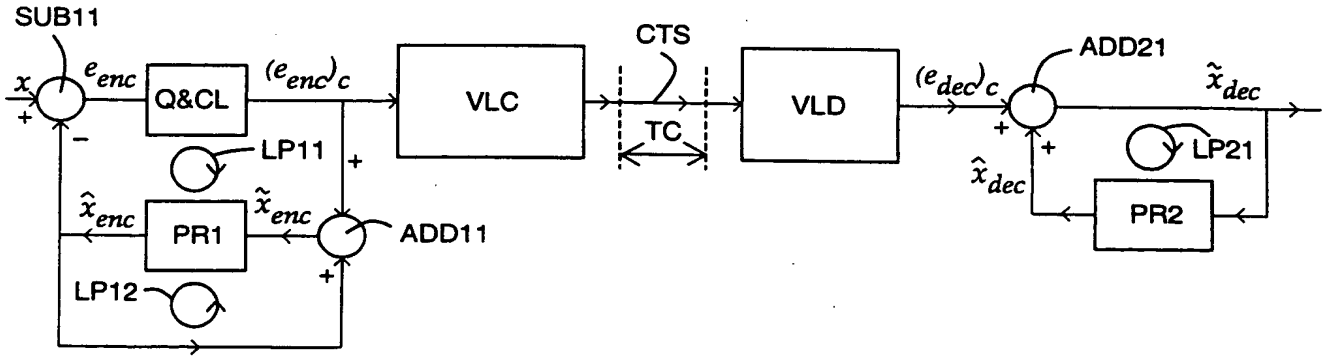


Fig. 6



PRIOR ART
Fig. 7

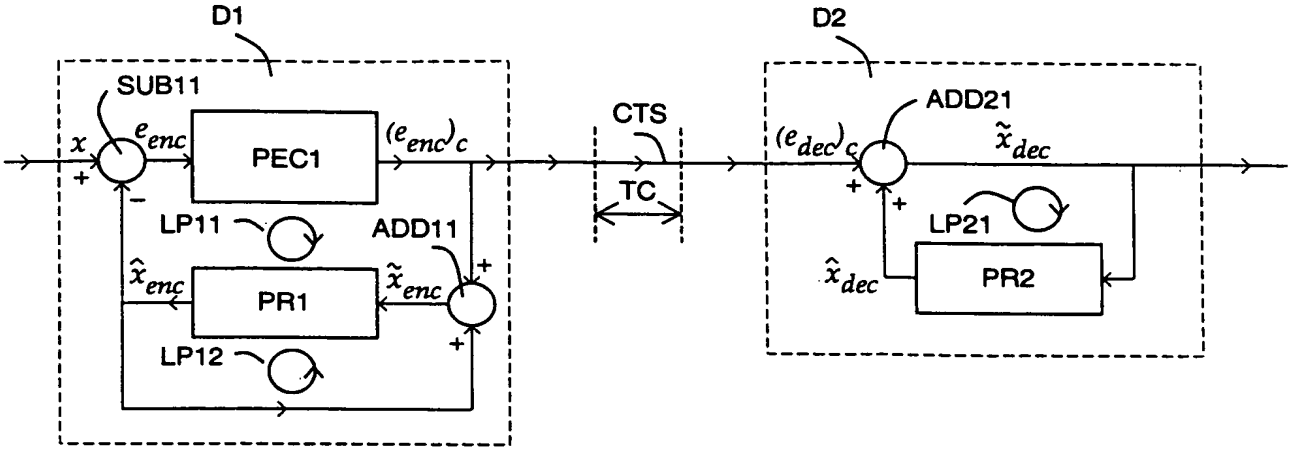

D1
SUB11
PEC1
LP11
ADD11
PR1
LP12
CTS
TC
D2
ADD21
LP21
PR2

Fig. 8

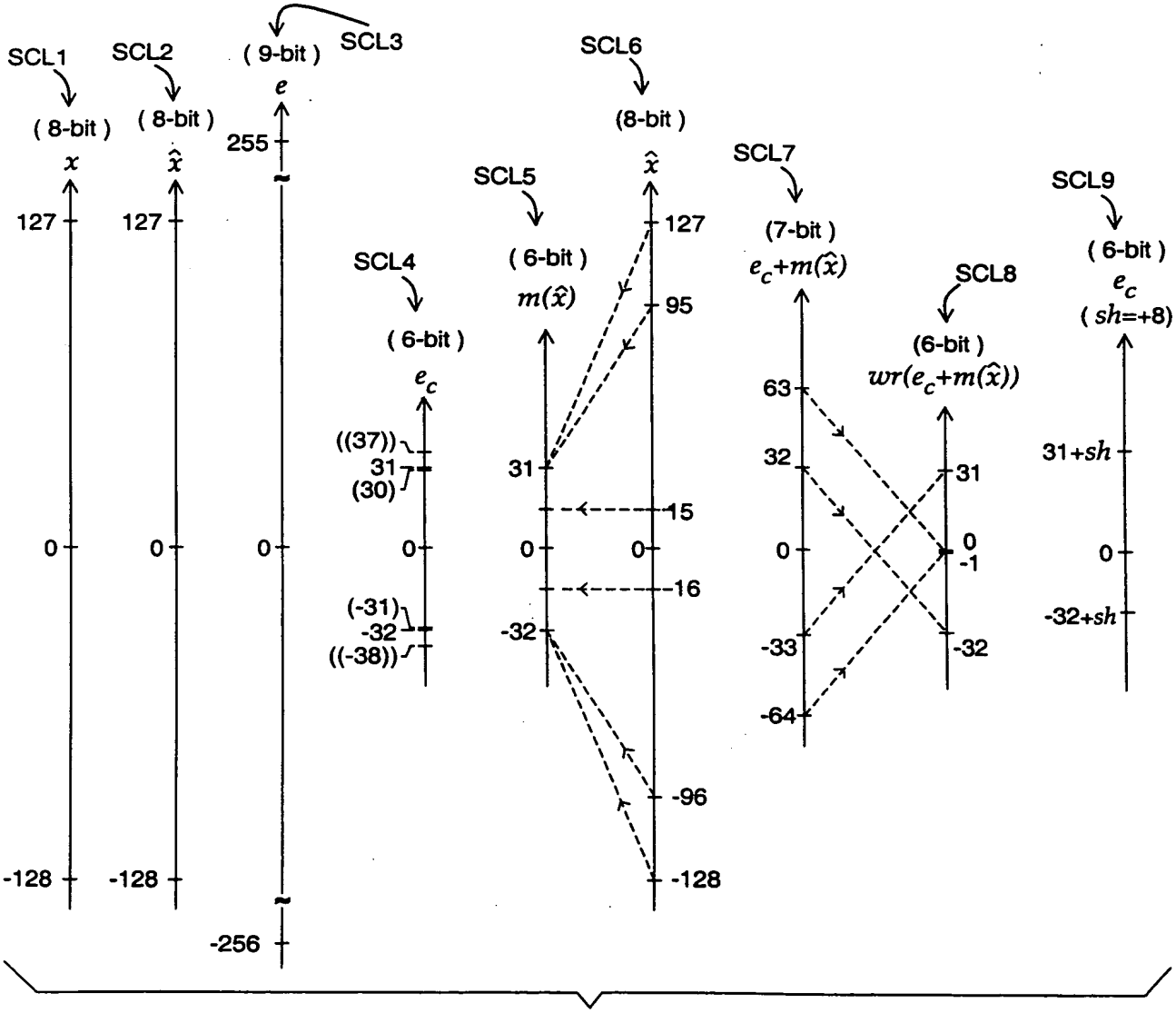

SCL1
SCL2
SCL3
SCL4
SCL5
SCL6
SCL7
SCL8
SCL9
(8-bit)
(9-bit)
(6-bit)
(8-bit)
(7-bit)
(6-bit)
127
0
-128
255
-256
95
31
15
-16
-32
-96
63
32
-33
-64
-1
((37))
(30)
((-38))
(-31)
31+sh
-32+sh

Fig. 9

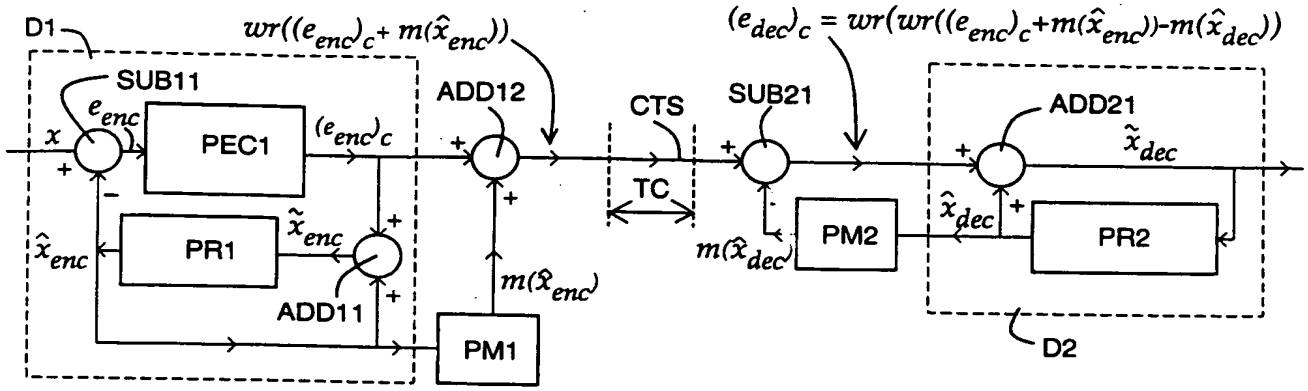


Fig. 10

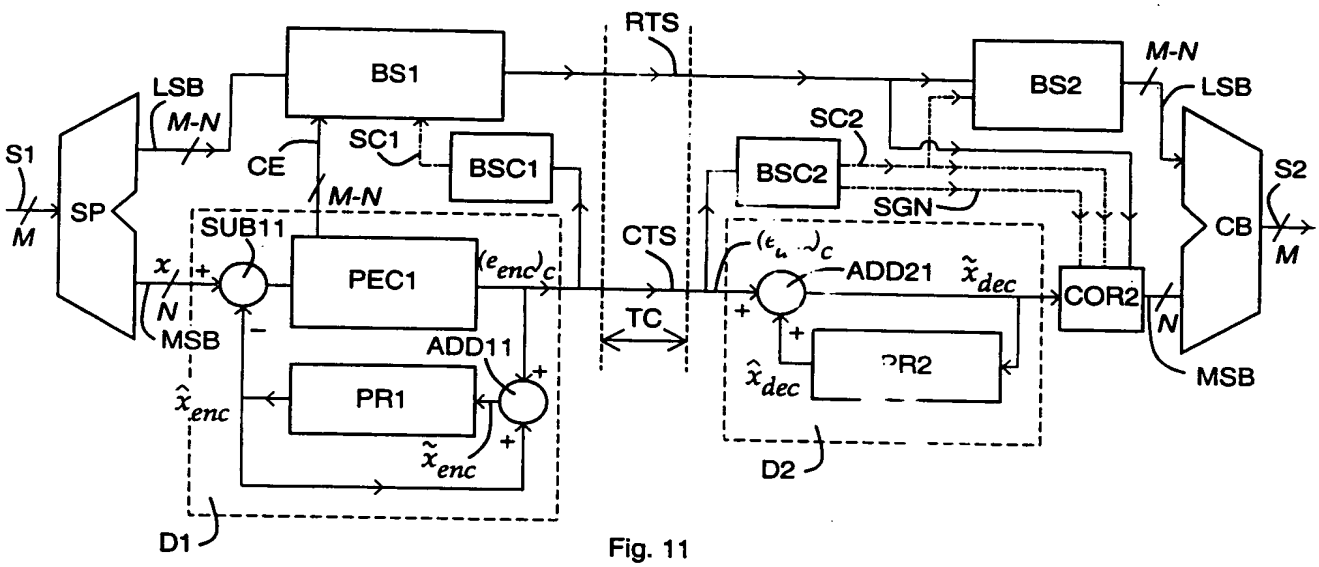


Fig. 11

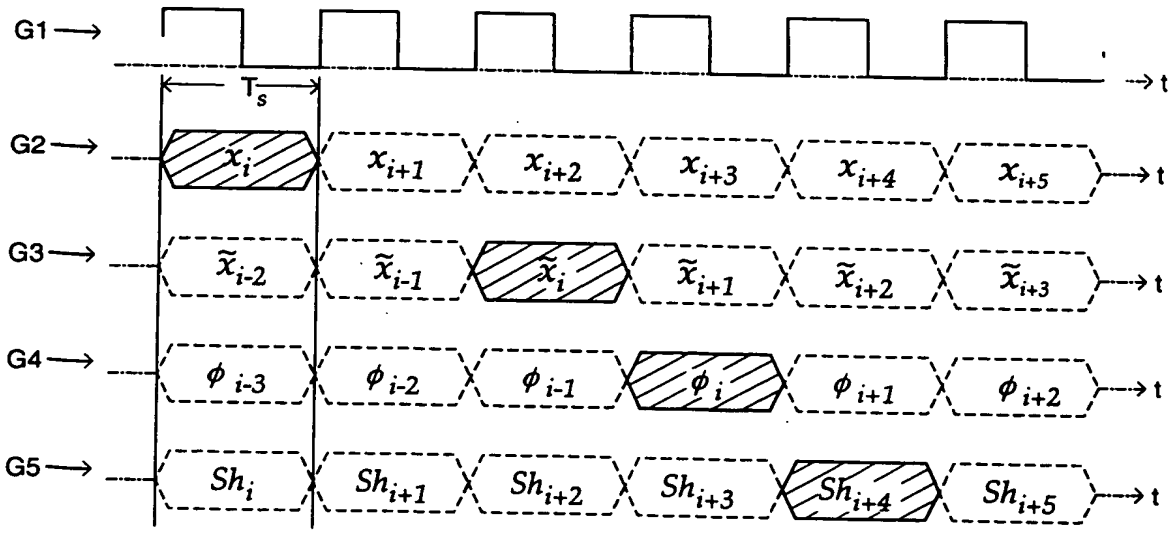


Fig. 20

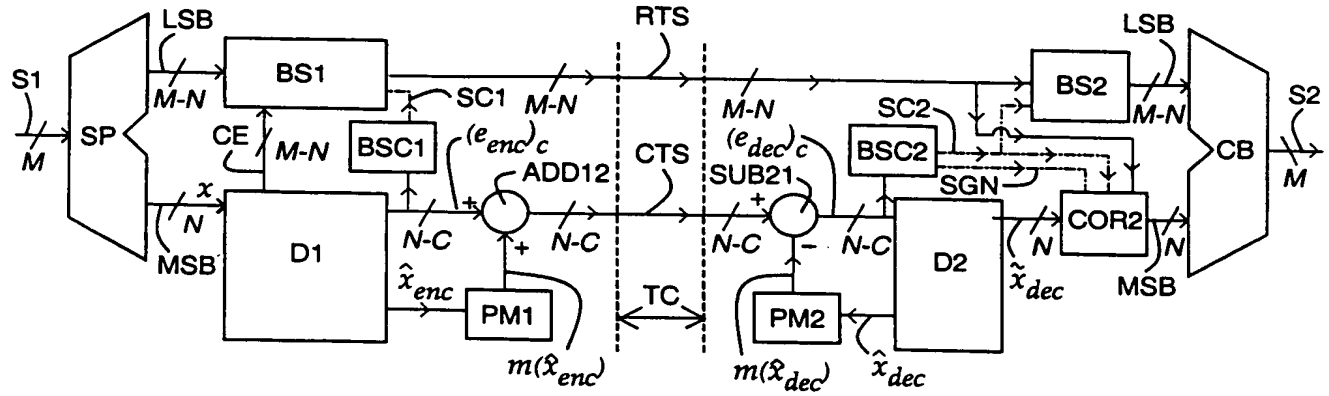


Fig. 12

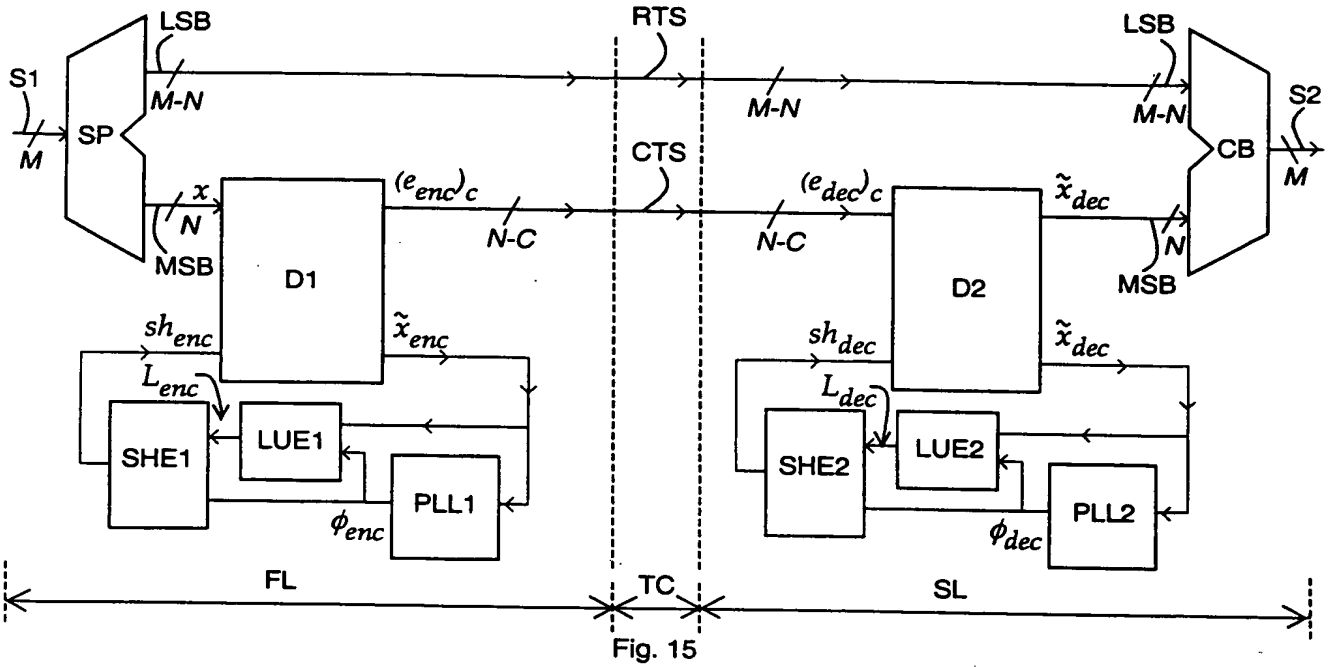


Fig. 15

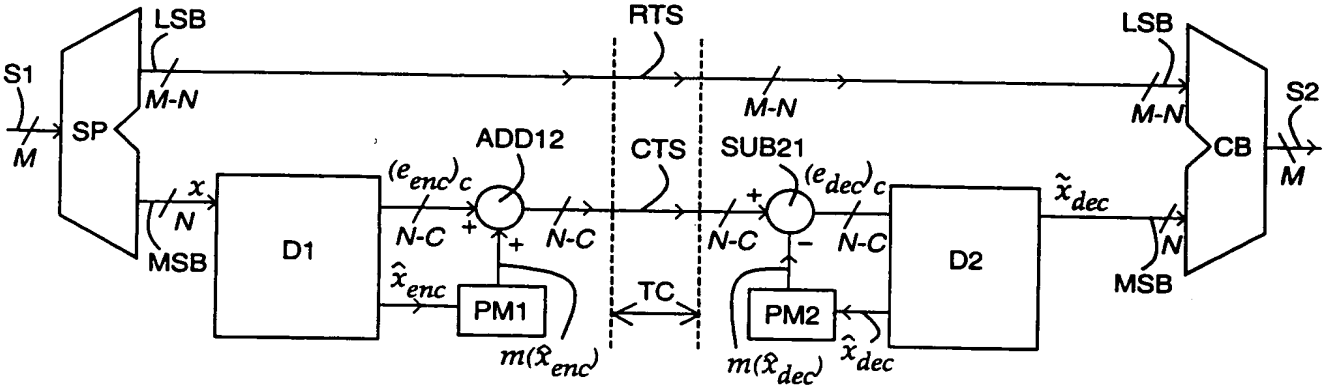


Fig. 21

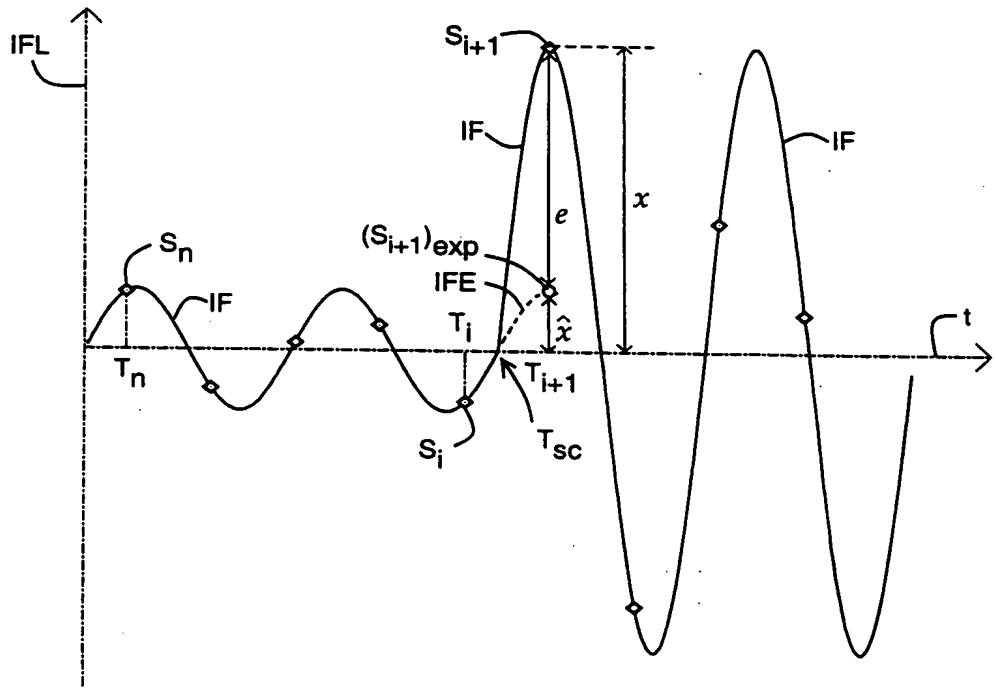

IFL
S_{i+1}
IF
IF
S_n
$(S_{i+1})_{exp}$
IFE
IF
e
x
T_i
$\hat{x}$
t
T_n
T_{i+1}
S_i
T_{sc}

Fig. 13

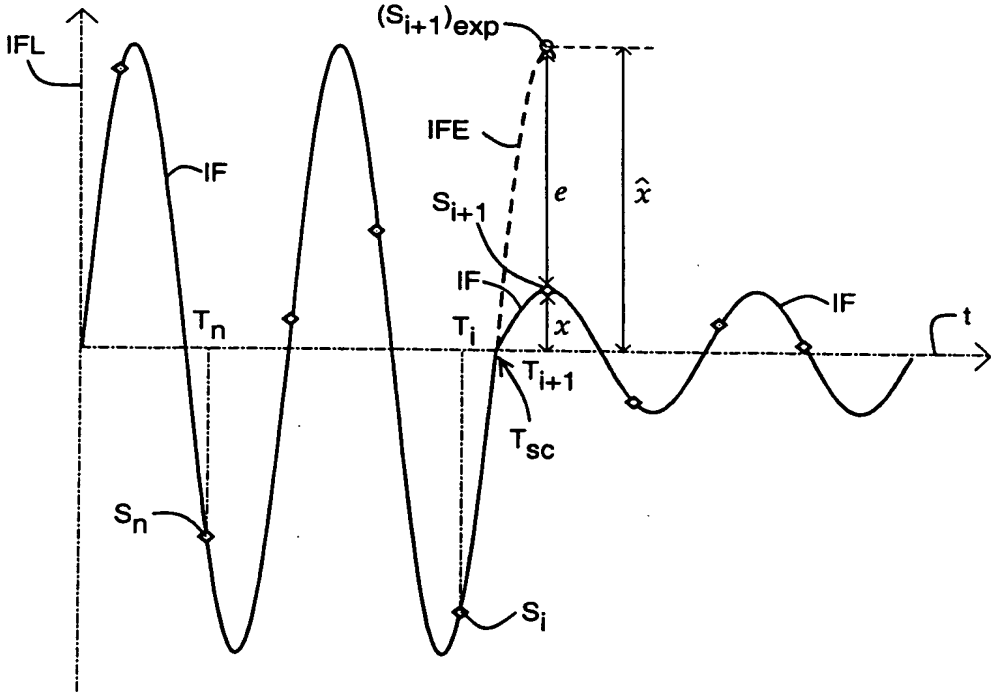

IFL
$(S_{i+1})_{exp}$
IFE
IF
e
$\hat{x}$
S_{i+1}
IF
IF
T_n
T_i
x
t
T_{i+1}
T_{sc}
S_n
S_i

Fig. 14

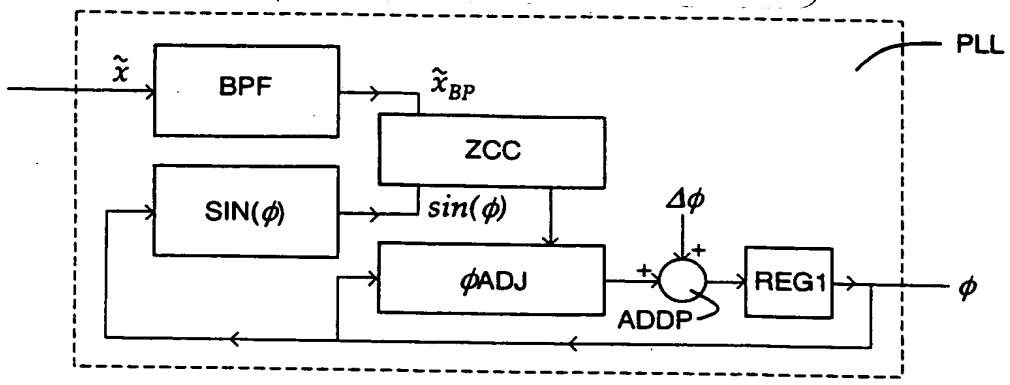


Fig. 16

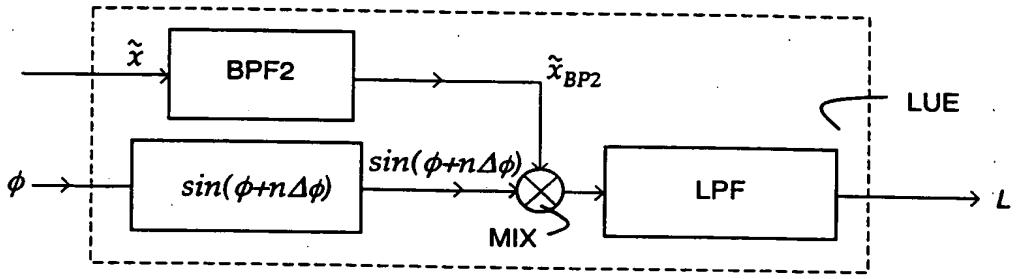


Fig. 17

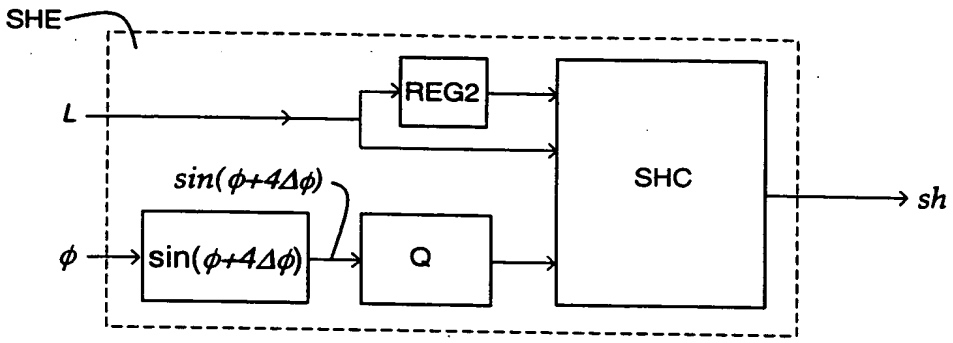


Fig. 18

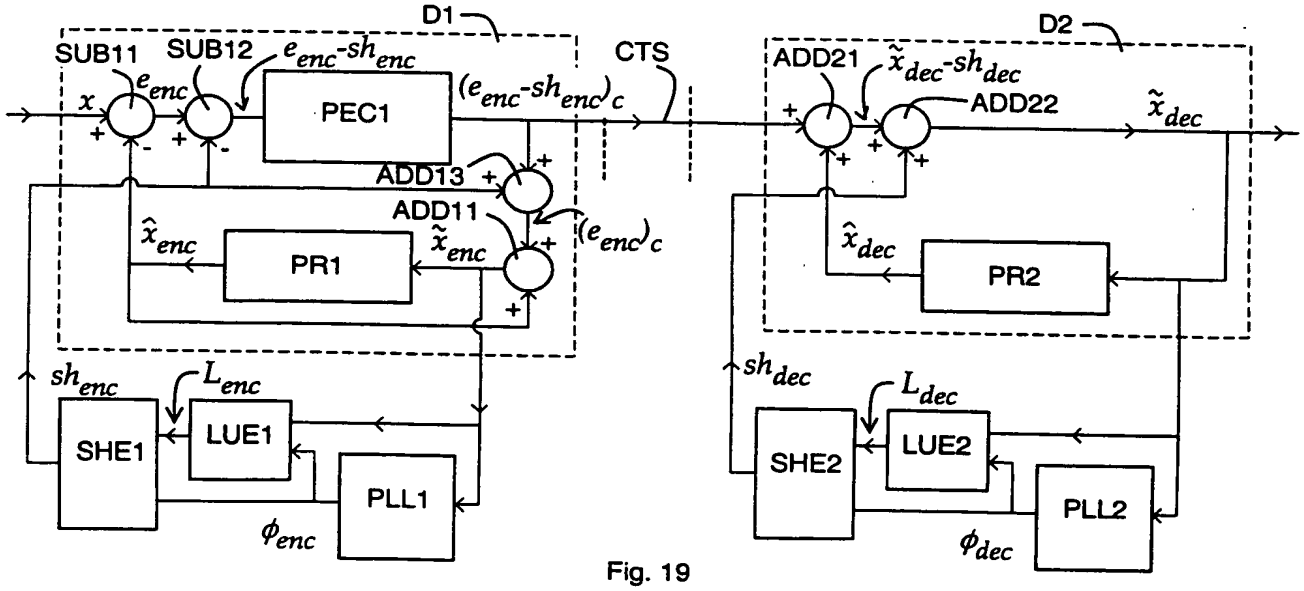


Fig. 19

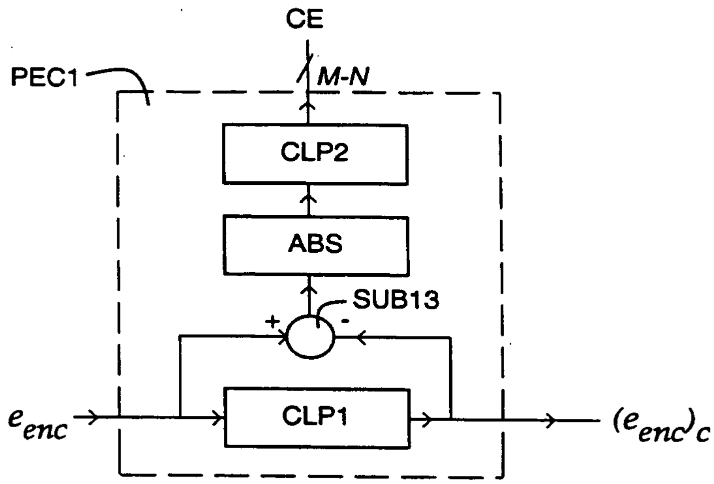

CE
M-N
PEC1
CLP2
ABS
SUB13
+
-
e_enc
CLP1
(e_enc)_c

Fig. 22

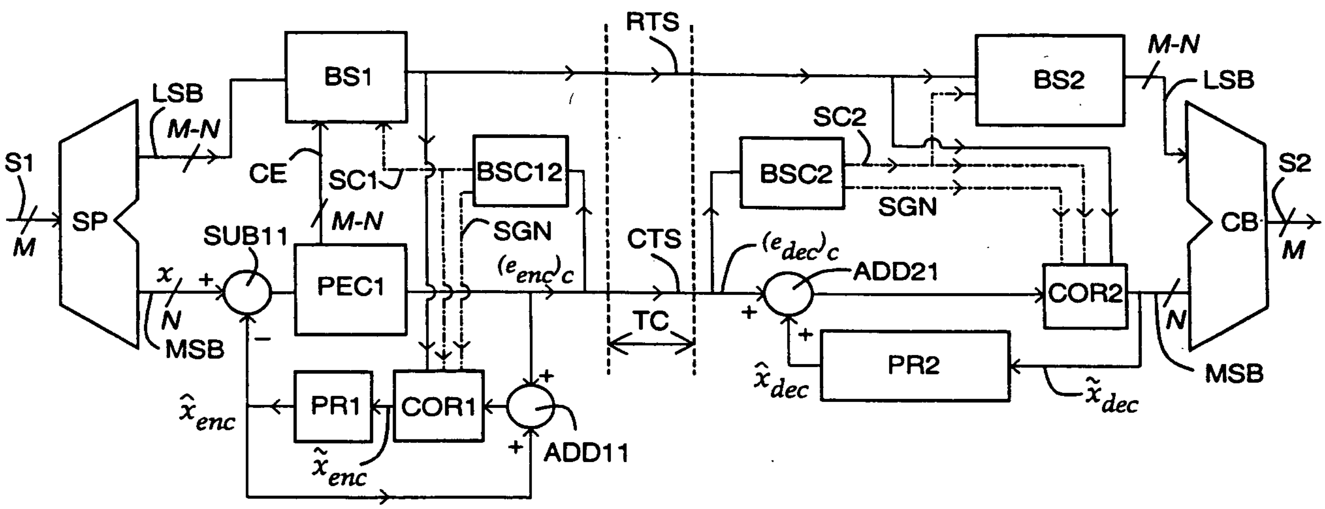

RTS
BS1
BS2
M-N
LSB
SC2
BSC2
BSC12
S1
M
SP
CE
SC1
SGN
CB
S2
SUB11
M-N
CTS
(e_dec)_c
ADD21
x
N
MSB
PEC1
(e_enc)_c
COR2
TC
PR2
x̂_dec
x̃_dec
x̂_enc
PR1
COR1
ADD11
x̃_enc

Fig. 23